PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

G. Barrie Kitto Daniel C. Hirshhorn

Daniel C. Hirshnor

Serial No.: 10/790,291

Filed: March 1, 2004

For: ANIMAL IMMUNOCONTRACEPTIVES EXPRESSED IN PLANTS AND USES

THEREOF

Group Art Unit: 1638

Examiner: Cathy Kingdon Worley

Atty. Dkt. No.: CLFR:232US

CERTIFICATE OF ELECTRONIC SUBMISSION

DATE OF SUBMISSION: December 21, 2006

DECLARATION OF GEORGE BARRIE KITTO UNDER 37 C.F.R. §1.131

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-01450

- I, George Barrie Kitto, to declare that:
- I currently hold the position of Professor in the Department of Chemistry and Biochemistry, College of Natural Sciences, at the University of Texas at Austin.
- Attached are datasheets from the laboratory notebooks of Daniel C. Hirschhorn.
 These datasheets illustrate work that was carried out in my laboratory at the University of Texas at Austin prior to April 13, 2001.

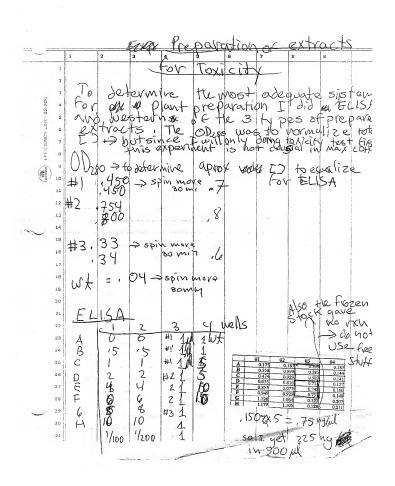
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- 3. Page 1 of the datasheets shows experiments using transgenic tobacco plants transformed with lactate dehydrogenase-C4 (LDH-C4). This datasheet shows results for the preparation of plant leaf extracts from these transgenic plants for the testing of these extracts for toxicity in mice. Also shown on the datasheet are results from an ELISA assay confirming the presence of LDH-C4 in the transgenic plant extracts. The transgenic plants expressing LDH-C4 were generated prior to these experiments.
- 4. Page 2 of the datasheets shows an experiment where extracts from recombinant tobacco plant leaves expressing LDH-C4 were prepared for contraceptive vaccine trials in mice. The transgenic plants expressing LDH-C4 were generated prior to this experiment.
- 5. I hereby declare that all statements made herein of my knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Decombor 21, 2006

George Barrie Kitto, Ph.D.



PLANTEXTRACTION First VACCINE TRIALS FOR for this purpose and sinte I'm leaving to Mexico & decided to ex thattiron loo arms of leaf (if posible) ·Take powder in LN2 and and Trynsfer pouted to a blender war containing ~ 100ml of IX PBS w/ 2 table to f protecte inhibitors and extend inhibitors 12 lastet no moderate is formed Fiftered through a chese cloth and depend not on how chunky finings ove filtered agains using a fiter white mesh Add 5x volumes of Acetone, and or several hours -50 ON Filtered through a t 20 / T hese cloth B. 4 m yrms of powder recovered